



APPLICANT FACSIMILE OF FORM PTO-1449 JUL 29 2002 7-80	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY DOCKET NO <b>GFN-5321DV</b>	SERIAL NO. <b>10/090,879</b>
LIST OF PUBLICATIONS CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT <b>William S. Somers et</b>	
		FILED DATE <b>March 4, 2002</b>	GROUP <b>1631</b>

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILED DATE IF APPROPRIATE
	A1	5,853,973	12/98	Kakefuda et al.	435	4	

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO

## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	A2	Abrahams, J.P. et al., "Methods used in the structure determination of bovine mitochondrial F1 ATPase," <i>Acta Cryst.</i> , D52:30-42 (1996)
	A3	Andersson, A. et al., "Crystal structure of the ternary complex of 1,3,8-trihydroxynaphthalene reductase from <i>Magnaporthe grisea</i> with NADPH and an active-site inhibitor," <i>Structure</i> , 4(10):1161-70 (1996)
	A4	Andrianopoulos, K. et al., "Identification of the fucose synthetase gene in the colanic acid gene cluster of <i>Escherichia coli</i> K-12," <i>J. Bacteriol.</i> , 180(4):998-1001 (1998)
	A5	Bauer, A.J. et al., "The molecular structure of UDP-galactose 4-epimerase from <i>Escherichia coli</i> determined at 2.5 Å resolution," <i>Proteins</i> , 12(4):372-81 (1992)
	A6	Bonin, C. P. et al., "The MUR1 gene of <i>Arabidopsis thaliana</i> encodes an isoform of GDP-D-mannose-4,6-dehydratase, catalyzing the first step in the de novo synthesis of GDP-L-fucose," <i>Proc Natl Acad Sci U S A</i> , 94(5):2085-90 (1997)
	A7	Branden, C. et al., "Determination of protein structures," in <i>Introduction to Protein Structure</i> , Garland Publishing, Inc. Chapter 17 pp. 269-285 (1991)
	A8	Breton, R. et al., "The structure of a complex of human 17β-hydroxysteroid dehydrogenase with estradiol and NADP <sup>+</sup> identifies two principal targets for the design of inhibitors," <i>Structure</i> , 4(8):905-15 (1996)
	A9	Broschat, K.O. et al., "Purification and characterization of GDP-D-mannose 4,6-dehydratase from porcine thyroid," <i>Eur. J. Biochem.</i> , 153(2):397-401 (1985)
	A10	Chang, S. et al., "An epimerase-reductase in L-fucose synthesis," <i>J. Biol. Chem.</i> , 263(4):1693-7 (1988)
	A11	De La Fortelle, E. de et al., "Maximum-likelihood heavy atom parameter refinement for multiple isomorphous replacement and multiwavelength anomalous diffraction methods," <i>Methods Enz.</i> , 276(part B):472-494 (1997)
	A12	Ensor, C.M. et al., "Bacterial expression and site-directed mutagenesis of two critical residues (tyrosine-151 and lysine-155) of human placental NAD(+)-dependent 15-hydroxyprostaglandin dehydrogenase," <i>Biochim. Biophys. Acta</i> , 1208(1):151-6 (1994)
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## OTHERS (including Author, Title, Date, Pertinent Pages, Etc.)

	B1		Ensor, C.M. et al., "Site-directed mutagenesis of the conserved serine 138 of human placental NAD+-dependent 15-hydroxyprostaglandin dehydrogenase to an alanine results in an inactive enzyme," <i>Biochem. Biophys. Res. Commun.</i> , 220(2):330-3 (1996)
	B2		Etzioni, A. et al., "Brief report: recurrent severe infections caused by a novel leukocyte adhesion deficiency," <i>N. Engl. J. Med.</i> , 327(25):1789-92 (1992)
	B3		Frey, P.A., "Complex pyridine neucleotide-dependent transformations," in <i>Pyridine Nucleotide Coenzymes: Chemical, Biochemical, and Medical Aspects</i> , Dolphin, D. et al. (Eds.) pp. 461-511, John Wiley and Sons, New York (1987)
	B4		Ghosh, D. et al., "Three-dimensional structure of holo 3 alpha,20 beta-hydroxysteroid dehydrogenase: a member of a short-chain dehydrogenase family," <i>Proc. Natl. Acad. Sci. U S A.</i> , 88(22):10064-8 (1991)
	B5		Ghosh, D. et al., "Structure of human estrogenic 17 beta-hydroxysteroid dehydrogenase at 2.20 A resolution," <i>Structure</i> , 3(5):503-13 (1995)
	B6		Ginsberg, V., "Studies on the biosynthesis of guanosine diphosphate L-fucose," <i>J. Biol. Chem.</i> , 236:2389-2393 (1961)
	B7		Hulsmeyer, M. et al., "Crystal structure of cis-biphenyl-2,3-dihydrodiol-2,3-dehydrogenase from a PCB degrader at 2.0 A resolution," <i>Protein Sci.</i> , 7(6):1286-93 (1998)
	B8		Jornvall, H. et al., "Short-chain dehydrogenases/reductases (SDR)," <i>Biochemistry</i> , 34(18):6003-13 (1995)
	B9		Kansas, G.S., "Selectins and their ligands: current concepts and controversies," <i>Blood</i> , 88(9):3259-87 (1996)
	B10		Karsan, A. et al., "Leukocyte Adhesion Deficiency Type II is a generalized defect of de novo GDP-fucose biosynthesis. Endothelial cell fucosylation is not required for neutrophil rolling on human nonlymphoid endothelium," <i>J. Clin. Invest.</i> 101(11):2438-45 (1998)
	B11		Kiefer, P.M. et al., "Altered structural and mechanistic properties of mutant dihydropteridine reductases," <i>J. Biol. Chem.</i> , 271(7):3437-44 (1996)
	B12		Kraulis, P.J., "Molscript: a program to produce both detailed and schematic plots of protein structures," <i>J. Appl. Cryst.</i> , 24:946-950 (1991)
	B13		Lesk, A.M., "NAD-binding domains of dehydrogenases," <i>Curr. Opin. Struct. Biol.</i> , 5(6):775-83 (1995)
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C2		Liu, H.-W. et al., "Mechanistic roles of tyrosine 149 and serine 124 in UDP-galactose 4-epimerase from <i>Escherichia coli</i> ," <i>Biochemistry</i> , 36(35):10675-84 (1997)
C3		Mergaert, P. et al., "The nodulation gene nolK of <i>Azorhizobium caulinodans</i> is involved in the formation of GDP-fucose from GDP-mannose," <i>FEBS Lett.</i> , 409(2):312-6 (1997)
C4		Merrit, E.A. et al., "Raster3D version 2.0: a program for photorealistic molecular graphics," <i>Acta Cryst.</i> , D50:869-873 (1994)
C5		Mosimann, S. et al., "A critical assessment of comparative molecular modeling of tertiary structures of proteins," <i>Proteins</i> , 23(3):301-17 (1995)
C6		Nakajima, K. et al., "Crystal structures of two tropinone reductases: different reaction stereospecificities in the same protein fold," <i>Proc. Natl. Acad. Sci. U. S. A.</i> , 95(9):4876-81 (1998)
C7		Obeid, J. et al., "Tyr-179 and Lys-183 are essential for enzymatic activity of 11 beta-hydroxysteroid dehydrogenase," <i>Biochem. Biophys. Res. Commun.</i> , 188(1):222-7 (1992)
C8		Oppermann, U.C. et al., "Active site directed mutagenesis of 3 beta/17 beta-hydroxysteroid dehydrogenase establishes differential effects on short-chain dehydrogenase/reductase reactions," <i>Biochemistry</i> , 36(1):34-40 (1997)
C9		Oths, P.J. et al., "Stereochemistry and mechanism of the GDP-mannose dehydratase reaction," <i>Carbohydr Res.</i> , 198(1):91-100 (1990)
C10		Otwinowski, Z. et al., "Processing of X-rays diffraction data collected in oscillation mode," <i>Methods Enzymol.</i> , 276:307-326 (1997)
C11		Persson, B. et al., "Short-chain dehydrogenases/reductases" in <u>Enzymology and Molecular Biology of Carbonyl Metabolism</u> , Vol. 5, Weiner et al. (Eds.), pp. 383-395, Plenum Press, New York (1995)
C12		Rafferty, J.B. et al., "Common themes in redox chemistry emerge from the X-ray structure of oilseed rape ( <i>Brassica napus</i> ) enoyl acyl carrier protein reductase," <i>Structure</i> , 3(9):927-38 (1995)
C13		Somers, W.S. et al., "GDP-fucose synthetase from <i>Escherichia coli</i> : structure of a unique member of the short-chain dehydrogenase/reductase family that catalyzes two distinct reactions at the same active site," <i>Structure</i> , 6(12):1601-12 (1998)
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D1	Stevenson, G. et al., "Organization of the Escherichia coli K-12 gene cluster responsible for production of the extracellular polysaccharide colanic acid," <i>J. Bacteriol.</i> , 178(16):4885-93 (1996)
D2	Sturla, L. et al., "Expression, purification and characterization of GDP-D-mannose 4,6-dehydratase from Escherichia coli," <i>FEBS Lett.</i> , 412(1):126-30 (1997)
D3	Sturla, L. et al., "Defective intracellular activity of GDP-D-mannose-4,6-dehydratase in leukocyte adhesion deficiency type II syndrome," <i>FEBS Lett.</i> 429(3):274-8 (1998)
D4	Sullivan, F.X. et al., "Molecular cloning of human GDP-mannose 4,6-dehydratase and reconstitution of GDP-fucose biosynthesis in vitro," <i>J. Biol. Chem.</i> , 273(14):8193-202 (1998)
D5	Swanson, B.A. et al., "Identification of lysine 153 as a functionally important residue in UDP-galactose 4-epimerase from Escherichia coli," <i>Biochemistry</i> , 32(48):13231-6 (1993)
D6	Tanaka, N. et al., "Crystal structure of the ternary complex of mouse lung carbonyl reductase at 1.8 A resolution: the structural origin of coenzyme specificity in the short-chain dehydrogenase/reductase family," <i>Structure</i> , 4(1):33-45 (1996)
D7	Tanaka, N. et al., "Crystal structures of the binary and ternary complexes of 7 alpha-hydroxysteroid dehydrogenase from Escherichia coli," <i>Biochemistry</i> , 35(24):7715-30 (1996)
D8	Tapia, A. et al., "Computer assisted simulations and molecular graphics methods in molecular design. 1. Theory and applications to enzyme active-site directed drug design," <i>Molecular Engineering</i> , 3:377-414 (1994)
D9	Thoden, J.B. et al., "Molecular structure of the NADH/UDP-glucose abortive complex of UDP-galactose 4-epimerase from Escherichia coli: implications for the catalytic mechanism," <i>Biochemistry</i> , 35(16):5137-44 (1996)
D10	Thoden, J.B. et al., "High-resolution X-ray structure of UDP-galactose 4-epimerase complexed with UDP-phenol," <i>Protein Sci.</i> , 5(11):2149-61 (1996)
D11	Thoden, J.B. et al., "Crystal structures of the oxidized and reduced forms of UDP-galactose 4-epimerase isolated from Escherichia coli," <i>Biochemistry</i> , 35(8):2557-66 (1996)
D12	Thoden, J.B. et al., "Structural analysis of UDP-sugar binding to UDP-galactose 4-epimerase from Escherichia coli," <i>Biochemistry</i> , 36(21):6294-304 (1997)

Examiner

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